

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
Application of Open Range)	WC Docket No. 11-183
Communications Inc. To Discontinue)	
Interconnected Services)	
)	
Fixed and Mobile Services in the Mobile Satellite)	
Service Bands at 1525–1559 MHz and 1626.5–)	ET Docket No. 10-142
2660.5 MHz, 1610–1626.5 MHz and 2483.5–)	
2500 MHz, and 2000–2020 and 2180–2200 MHz)	
)	
Amendment of Parts 1, 21, 73, 74 and 101)	
Commission's Rules to Facilitate the Provision of)	
Fixed and Mobile Broadband Access, Educational)	WT Docket 03-66
and Other Advance Services in the 2150–2162)	
and 2500–2690 MHz Bands)	
)	

To: The Commission

Comments of EIBASS

Engineers for the Integrity of Broadcast Auxiliary Services Spectrum (EIBASS) hereby respectfully submits its comments in the above-captioned proceeding relating to a request by Open Range Communications Inc (Open Range) to discontinue interconnected voice over internet protocol (iVOIP) services.¹

¹ EIBASS notes that on November 8, 2011, the Commission granted Open Range's requests to cancel 168 of its fixed point-to-point Private Operational Fixed Service (POFS) microwave licenses.

EIBASS further notes that on November 9, 2011, the House Committee on Energy and Commerce sent a bipartisan letter to the Department of Agriculture, questioning a \$267 million federal loan under the Rural Utility Service (RUS) program given to Open Range, of which \$73.5 million of taxpayer money is now at risk because of the Open Range bankruptcy filing. That letter questioned "incomplete applications," and requested the Department of Agriculture to provide the Committee with "the complete Open Range project application together with any documents related to the project that have been added since the initial application was filed."

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I. The Open Range Service Should Indeed Be Discontinued Due to Open Range's Failure to Frequency Coordinate and Causing Harmful Interference to Grandfathered TV BAS Channel A10

1. Because Open Range has been using 2,487.5–2,495 MHz for its iVOIP service in at least Indiana and Northern California and causing harmful interference to grandfathered TV Broadcast Auxiliary Service (BAS) Channel A10 (2,483.5–2,500 MHz) in those locations, EIBASS supports the proposed discontinuation. This operation is pursuant to Special Temporary Authority (STA) issued by International Bureau, File Number SAT-STA-20110106-0003.²

2. The Open Range base station at St. John, Indiana caused harmful interference to the electronic news gathering (ENG) operations of Station WBBM-TV (CBS), D12 (V02), Chicago, IL, TV Pickup Station KB55028; and to the ENG operations of Station WGN-TV (CW), D19 (V09), Chicago, IL, TV Pickup Station KQ8499.³ Both of these stations have grandfather rights to TV BAS Channel A10. EIBASS has also learned that an Open Range base station at Sutter Buttes, near Yuba City, CA, has similarly caused harmful interference to the ENG operations of TV Station KOVR (CBS), D25 (V13), serving the Sacramento-Stockton-Modesto, CA, Designated Market Area (DMA), and licensee of TV Pickup Station KB55007. This station also has A10 grandfather rights.

3. Open Range has admitted in writing that it failed to undertake any frequency coordination for its St. John station.⁴ EIBASS can find no evidence that Open Range made any attempt to frequency coordinate its Sutter Buttes station. Indeed, it appears that Open Range was entirely clueless that it was deploying on spectrum having co-primary, earlier-in-time, users.

4. Further, the STA under Open Range was operating had an unambiguous requirement that Open Range immediately suspend its operation if harmful interference was caused, something that Open Range failed to do.⁵

² See the July 7, 2011, and the September 6, 2011, EIBASS filings to WT Docket 10-142.

³ See the March 21, 2011, Case Report of the FCC Chicago Field Office, File Number EB-11-CG-0015.

⁴ See *Third Response of Open Range Communications Inc.* to FCC Enforcement Bureau case number EB-11-CG-0015 (a copy of this Open Range response was included with the September 6, 2011, EIBASS filing to WT Docket 10-142).

⁵ The STA included the following language, at paragraph 54(d) of the September 14, 2010, STA Order (DA 10-1740):

Open Range shall not cause harmful interference to, and shall not claim protection from, any other lawfully operating station. In the event harmful interference results from operation pursuant to this authorization, Open Range shall cease operations immediately upon notification of such interference, and shall immediately inform the Federal Communications Commission, in writing, of the incident.

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5. Thus, EIBASS supports this rulemaking, and hopes that in the future the Commission will not grant authority, STA or otherwise, for S-band Mobile Satellite Service Ancillary Terrestrial Component (MSS ATC) operation until the 2.5 GHz TV BAS band is first re-farmed to eliminate the mutual exclusivity that now exists between grandfathered TV BAS Channel A10 operations and S-band MSS ATC operation.⁶

6. EIBASS notes that in the recently released WT Docket 10-153 Report and Order (R&O)⁷, the Commission concluded that Private Operational Fixed Service (POFS) stations could not share spectrum at 7 and 13 GHz with TV Pickup operations, and therefore will not allow newcomer POFS fixed-link stations access to the 7 and 13 GHz TV BAS bands if the POFS transmit end, POFS receive end(s), or any portion of POFS path(s) are inside the operational area of a co-channel TV Pickup station. And this was only for newcomer fixed-link POFS stations, which must use directional transmitting antennas meeting at least FCC Category B criteria, and whose locations would be fixed and known. The mutual exclusivity between ENG operations and MSS ATC, with its cellular-like architecture and base station transmissions triggered by subscriber demand, would be far worse.

II. Failure of Open Range to Disclose Now-Documented Harmful Interference in its October 17, 2011, Request for STA Extension

7. EIBASS notes that on October 17, 2011, Open Range filed an application to renew its STA, File Number SAT-STA-20111017-00203. However, Open Range did not disclose in that application the Chicago harmful interference, nor the FCC Enforcement Bureau case against it. This the STA extension request was granted on November 1, 2011, and notice of that action appeared in the November 4 Daily Digest. The renewed STA, through March 29, 2012, has the same immediate-shutdown-if-harmful-interference clause.

8. EIBASS believes that the October 17, 2011, filing by Open Range, with its failure to disclose the Chicago interference, may well constitute a violation of Section 1.65 of the Commission's Rules (Substantial and Significant Changes in Information Furnished by Applicants to the Commission).

9. EIBASS finds it ironic that on the one hand the International Bureau issued an STA with an iron-clad immediate-shutdown-if-harmful-interference clause, but on the other hand allows use

⁶ EIBASS notes that between co-primary users, the newcomer user is obligated to protect the earlier-in-time user. See, for example, paragraph 48 of the February 7, 2002, ET Docket 98-142 R&O (MSS downlinks in the 7 GHz TV BAS band).

⁷ August 9, 2011, WT Docket 10-153 R&O, at paragraphs 16 and 18.

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of the frequency for an FCC Part 9 Interconnected VOIP Services that requires prior notification to customers before service can be suspended.⁸ The lessons that EIBASS hopes are learned from this episode are that Part 9 Interconnected VOIP services should not be allowed on a secondary STA basis, and that any authorization that is co-channel to grandfathered TV BAS Channel A10 contain an explicit frequency coordination obligation, in case the recipient is somehow unfamiliar with the frequency coordination promises given to BAS licensees in IB Dockets 01-185, 02-364 and 07-253; ET Dockets 00-258, 04-356 and 10-142; and WT Docket 03-66.

10. Indeed, even if Open Range were to obtain a non-STA authorization for use of 2,487.5–2,495 MHz MSS ATC spectrum, that use would still be obligated to protect co-primary and earlier-in-time Part 74 grandfathered TV BAS Channel A10 operations, since as previously documented, between co-primary users the newcomer user must protect the incumbent user. Not ignore the incumbent, or pretend they don't exist, or suggest that the incumbent simply shift its operations to some other TV BAS channel.⁹

III. Globalstar Counter Proposal to Re-Farm the 2.5 GHz TV BAS Band

11. On August 19, 2011, Globalstar informally contacted EIBASS and indicated that it would be willing to withdraw its opposition to the re-farming of the 2.5 GHz TV BAS band proposed by SBE in 2005, if broadcasters would agree to three 11-MHz wide channels instead of three 12-MHz wide channels.¹⁰ After discussions amongst its members, the EIBASS informal reply to Globalstar, on August 22, was that Globalstar should make this counter proposal in its comments to the EIBASS Petition for Reconsideration of the ET Docket 10-142 R&O; those comments were due on August 25, 2011. EIBASS suggested this course of action to Globalstar because the comments of 2.5 GHz TV BAS band licensees would also need to be solicited; that is, it was not EIBASS' place to unilaterally endorse such a proposal, since EIBASS itself holds no BAS licenses.

⁸ Section 9.5(e)(1) of the FCC rules.

⁹ Globalstar, Inc. August 29, 2011, WT Docket 10-142 Opposition comments, at page 2 ("EIBASS requests for relief in the Petition are irrelevant") and page 3 ("Open Range's alleged failure to take the steps necessary to avoid interference to BAS systems says nothing about Globalstar's future ATC activities in the Big LEO band."). Globalstar August 18, 2006, WT Docket 03-66 comments, at page 7 ("BAS licensees can easily use one of the nine additional channels available to them in the (relatively unlikely) event that MSS/ATC ad BAS operations occur at the same time in exactly the same location.").

¹⁰ Proposed by SBE in its July 11, 2005, *Response to Reply of Globalstar to the Informal Objection of the Society of Broadcasts Engineers, Inc.*

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12. When preparing its Reply Comments, filed on September 6, 2011, EIBASS did not address the telephone call it had received from Globalstar on August 19, believing that Globalstar had decided not to pursue its band re-farming counter proposal in its August 25 filing. EIBASS felt that it could not ethically comment on an informal proposal made in a telephone call, but which apparently had not been submitted in writing. EIBASS was disappointed, because such a counter proposal constituted, in EIBASS' view, an admission by Globalstar that ENG operations could not share co-channel spectrum in the same area at the same time, and thus a band re-farming, to eliminate the co-channel operation, was the only viable solution.

13. However, in preparing these WC Docket 11-183 comments, EIBASS has now discovered that the August 25 Globalstar Opposition filing did indeed include its band re-farming counter proposal, albeit in a footnote to the last page of its five-page Opposition. EIBASS regrets initially missing that counterproposal, and is gratified to see it. By acknowledging the Globalstar proposal in these related WC Docket 11-183 comments, EIBASS hopes that TV BAS licensees operating in the 2.5 GHz band, and not just TV BAS licensees with Channel A10 grandfather rights, will comment. Input is also needed from the manufacturers of TV BAS microwave radios and the necessary supporting hardware, such as special filters.

14. EIBASS believes that modern-day 2/2.5 GHz ENG radios would have no problem operating on the center frequencies needed for three 11-MHz wide channels instead of three 12-MHz wide channels, and that pedestal bandwidths fitting inside an 11-MHz wide ENG channel would be practical. In the most congested ("Category I") TV markets, perhaps even split-channel operation, albeit with reduced data rate pedestals fitting inside a 5.5-MHz wide split channel, might even be possible.

15. Eliminating the co-channel overlap between grandfathered TV BAS Channel A10 and MSS ATC, as shown by the attached Figure 2, would additionally restore that band to having three available channels for all TV BAS eligible licensees. Thus, EIBASS sees merit in the Globalstar counter proposal, and urges the Commission to either issue a ET Docket 10-142 Further Notice of Proposed Rulemaking, or start a new rulemaking, proposing to re-farm the 2.5 GHz TV BAS band to three 11-MHz wide channels, commencing at 2,450 MHz and ending at 2,483 MHz. In that event, EIBASS would have no objection to the MSS ATC band being extended downwards from 2,487.5 MHz to 2,483.5 MHz, thus resulting in a 0.5 MHz guard band between the top of TV BAS Channel A10d3 and the bottom of the MSS ATC band. A guard band would allow the use of sharply tuned protective filters, where needed. In some cases an A8d3 through A10d3 band pass filter on the ENG receiver, or an MSS ATC reject filter, or both, may be needed. In

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some cases the MSS ATC base station may need to install additional filtering. The important point is that with a guard band, such filters, when needed, should be possible.

IV. Summary

16. Discontinuance of Open Range's careless and imprudent co-channel interfering operations can not come too soon as far as EIBASS is concerned. The Chicago interference, caused by an Open Range base station 90 km from the ENG receiving locations atop the Hancock Center and the Sears Tower, demonstrates conclusively that S-band MSS ATC and co-primary, grandfathered, and earlier-in-time Channel A10 ENG operations cannot coexist. The only reasonable solution is to re-farm the 2.5 GHz TV BAS band and eliminate the massive frequency overlap. EIBASS believes that the Globalstar band re-refarming counter proposal has merit, and should be pursued. Of course, under the principle established by the Commission in the ET Docket 92-9 "Emerging Technologies" rulemaking, this will obligate MSS ATC entities, and 2,496–2,502 MHz Broadband Radio Service (BRS) Channel 1 licensees, to pay all reasonable and prudent relocation costs. The Commission will need to address how those costs should be shared between S-band MSS ATC entities and BRS Channel 1 licensees.

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V. List of Figures

17. The following figures have been prepared as a part of these WC Docket 11-183 comments:

1. Existing versus 2005 SBE proposed new 2.5 GHz TV BAS band plan.
2. Existing versus Globalstar counter proposal for re-farming the 2.5 GHz TV BAS band.

Respectfully submitted,

/s/ Dane E. Ericksen, P.E., CSRTE, 8-VSB, CBNT
EIBASS Co-Chair
Hammett & Edison, Inc., Consulting Engineers
San Francisco, CA

/s/ Richard A. Rudman, CPBE
EIBASS Co-Chair
Remote Possibilities
Santa Paula, CA

November 17, 2011

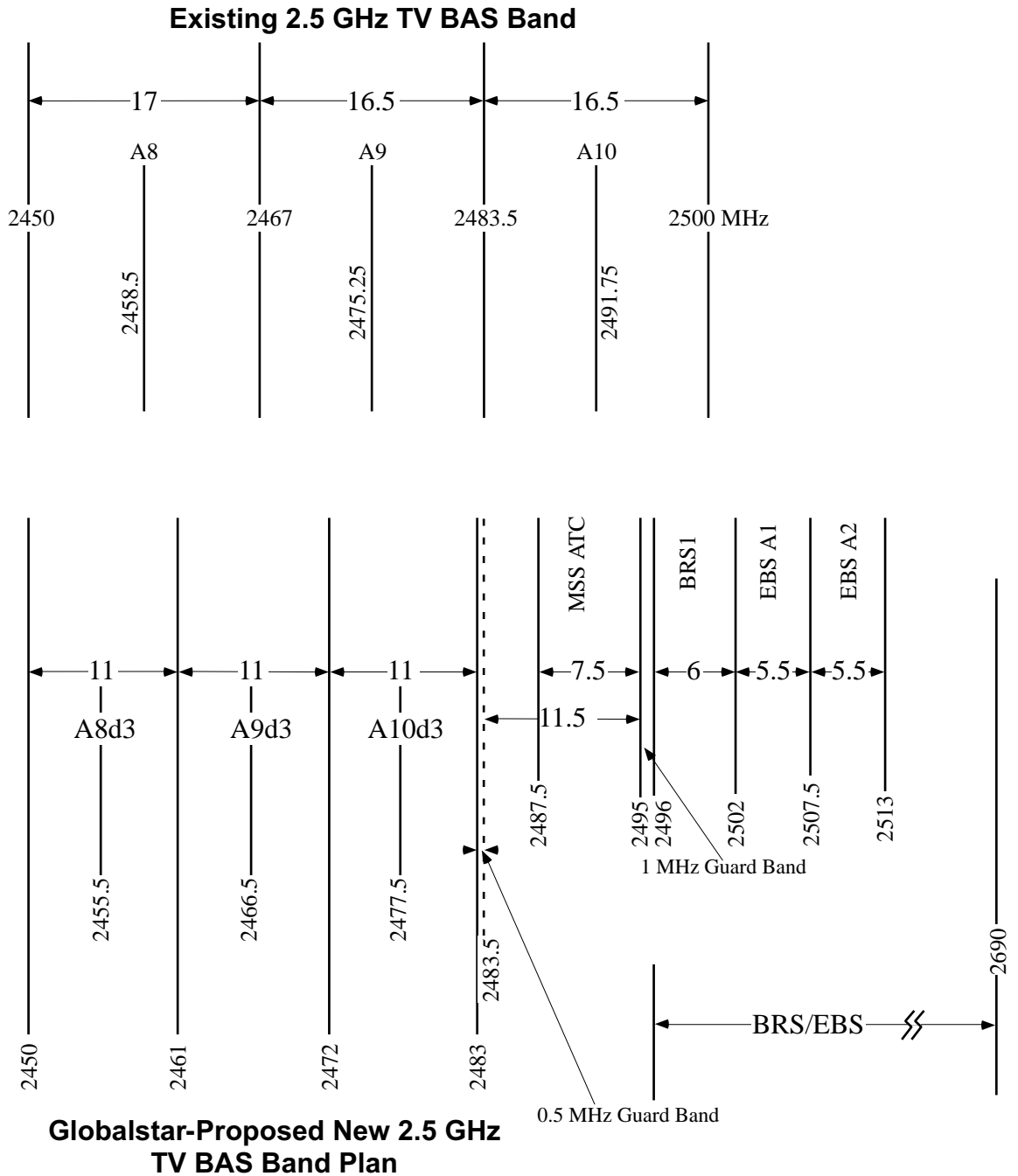
EIBASS
18755 Park Tree Lane
Sonoma, CA 94128
707/996-5200
dericksen@h-e.com

Existing vs SBE-Proposed New 2.5 GHz TV BAS Band Plan



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Existing vs Globalstar-Proposed New 2.5 GHz TV BAS Band Plan



All frequencies and bandwidths are in MHz.